

Musical genre and gender as factors in higher education learning in music

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Educational and psychological research suggests that gender and musical genre can influence musical learning and the development of musical identities, particularly during adolescence. However, there is a relative paucity of educational studies in higher education (HE) concerning the possible impact on musical learning of gender and musical genre, either individually or collectively. As part of a two-year comparative study funded under the Economic and Social Research Council (ESRC)'s Teaching and Learning Research Programme (TLRP) that is focused on musical learning in HE, we investigated the effect of musicians' gender and chosen musical performance genre (embracing Western classical, jazz, popular, and Scottish traditional music) on undergraduate and postgraduate (career-based) learning. Data were gathered through a web-based survey of participants ($n=244$) drawn from four HE institutions (HEIs) in Glasgow, York, Leeds and London and the wider workplace, supplemented by semi-structured case study interview data from a sub-set ($n=27$) of these participants. Statistical and qualitative analyses indicate that gender and genre can impact individually on some aspects of participants' psychological and socio-psychological make-up and in their attitudes to learning. However, there was no evidence statistically or qualitatively of any major interaction between the variables of genre and gender in the data from the chosen measures. Furthermore, irrespective of musical genre, skilled musicians had many aspects in common in terms of their core musical identities and behaviours, implying that the requirements for highly skilled musical performance can transcend particular group characteristics.

Keywords: musical genre; gender; higher education; learning; music

Introduction

One of the features of virtually all contemporary cultures is the wide diversity of musics that are practised and enjoyed by different groups within the local populations. The ubiquity and diversity of musical behaviour – of our ability to find meaning in the organisation of sound – appears to be characteristic of the human condition (e.g. Cross 2005). Educational and psychological research suggests a symbiotic link between musical learning and the formation of musical identities (the role of music in defining who we are – 'music in identity', as well as the nature of our individual relationships with certain kinds of music – 'identity in music' (Hargreaves, Miell, and MacDonald 2002)). Both musical learning and identity are shaped by developmental experiences in various socio-cultural contexts across the lifespan (see Welch 2006, 2007).

Within the plurality of the world's musics, many different musical genres co-exist. One ethnomusicological study of South Asian music in the UK, for example, found 45 different types of music being practiced, being related to classical and popular music traditions, interfaced with particular geographical locations, communities, languages and generations (Farrell, Bhowmick,

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and Welch 2005). Each musical style (performance behaviour) and genre (underlying musical structure and design) gave rise to particular musical identities, enabling performers and listeners to have a sense of musical self, as well as of (within/without) group membership.

Similarly, the construction of gender identity (being one aspect of group membership) is often interwoven with music. Various studies have reported gender differences in musical behaviours, including preferences, such as in music listening, school-aged instrumental choice and cultural norms concerning appropriate musical roles (e.g. Christenson and Peterson 1988; Comber, Hargreaves, and Colley 1993; O'Neill and Boulton 1996; Green 1997; Dibben 2002; Ho 2003). Such findings are part of wider research evidence concerning the relationship between music and culture (e.g. Clayton, Herbert, and Middleton 2003), embracing examples that range from the predominance of female vocalists in South Asian Music (Farrell, Bhowmick, and Welch 2005) to the relative over-representation of women as electric bass players in the largely male world of alternative rock music (Clawson 1999).

It seemed appropriate, therefore, that the *Investigating Musical Performance (IMP): Comparative Studies in Advanced Musical Learning* research project,¹ with its focus on the relationship between musical genre and musical learning in higher education and beyond, should take account of gender as one of the possible key variables, not least because initial demographic analyses of the research sites revealed the relative imbalance in the gender make-up of the music student bodies across and within the study's four participant institutions (see 'Description of participants' below). Although genre and gender have been reported singly and sometimes collectively in the research literature, there is a relative paucity of studies embracing these in relation to musical teaching and learning in higher education.

Background

Theories of expertise and expert performance across diverse learning domains – such as those of Sosniak (1990), Manturzewska (1990) and Ericsson and Smith (1991) – offer useful insights into the development of the professional musician, not least because of the implication that extended expertise is the result of deliberate, goal-directed practice and allied monitoring skills (Ericsson 2006), embracing aural, cognitive, technical, musicianship, performance, learning and life skills (e.g. Hallam 2005). Much of this evidence has arisen from studies concerning the development of individual Western classical musicians. Less has been reported about the musical expertise development of popular musicians, not least because musical cultures that are other-than-classical have not received as much attention in the music psychology literature (Sloboda 2000). However, the recent establishment of a number of innovative undergraduate degrees in the UK that specialise in other-than-classical genres such as jazz, popular and traditional music are seen to pose new challenges for formal HE music education where Western classical music has predominated (e.g. Lebler 2007).

Within the few existing studies in the learning literature comparing musical genres, classical musicians are reported as focusing more on solitary practice, mastery of technical requirements and acquiring new pieces, whereas jazz musicians are likely to try to improve their performance through both communal and solitary practice, observation of jam sessions and active listening of other musicians (Gruber, Degner, and Lehmann 2004). Additionally, classical musicians are reported to attach greater importance to musical skills associated with the drive to excel musically and technically, as well as those skills involving notation, whilst other-than-classical musicians appear to attach greater importance to non-notation musical skills, such as memorising and improvising (Creech et al. 2008).

Research evidence is mixed on the influence of gender on musicians' learning. Some research suggests that female musicians use learning strategies more extensively compared to males, but

that these may be less efficacious overall (Pajares 2002). More recent research reports that female and male students may use the same range of learning strategies, but that males make greater use of critical thinking strategies in their evaluations of excellence in musical performance (Nielsen 2004). In other research, female musicians were found to attribute higher significance to particular musical skills, indicating that their 'ideal' level of expertise in music may be inflated compared to that of their male counterparts (Papageorgi et al. in press). Additionally, in the same study, female musicians evidenced a larger gap between their ideal and self-perceived musical skill levels, suggesting that female musicians may be less confident performers and, therefore, more at risk of having negative performance experiences and suffering from performance anxiety.

Although the above studies provide some insights into the possible influences of gender and genre in advanced musical learning, the evidence base is not extensive, nor conclusive. Consequently, our focus is to examine whether intending and actual professional musicians' attitudes and approaches to their advanced performance learning are related to (i) musical performance genre, (ii) participant gender or (iii) both genre and gender together.

Context of the study: The IMP project

The *Investigating Musical Performance (IMP): Comparative Studies in Advanced Musical Learning* research project is a two-year (2006–2008) comparative study that has been devised to investigate how classical, popular, jazz and Scottish traditional musicians deepen and develop their learning about performance in undergraduate, postgraduate and wider music community contexts. The project is conceived as a multi-site, multi-methods study that draws equally on the strengths and expertise of four higher education institutions (HEIs), the Institute of Education, University of London; University of York; Leeds College of Music; and the Royal Scottish Academy of Music and Drama, Glasgow.

Included in the research methodology was a specially devised, web-based questionnaire comprising 57 questions, linked electronically to a 623-field database. It was distributed on two separate occasions and served to provide a comprehensive, short-term, longitudinal comparison of participants' backgrounds, attitudes and approaches to advanced performance learning over a 12-month period. Complimentary data were obtained from semi-structured interviews, individual case studies, focus groups, participant email diaries and digital video analyses of studio-based HEI instrumental lessons.

Methodology

In this paper, data are drawn from the Phase 1 survey questionnaire (completed June–July 2006) and from case study interviews with undergraduate and portfolio career musicians (completed January–May 2007). The contents of the survey and interviews embraced a wide range of perspectives on musical performance that built on diverse literature sources related to three themes: musical biographies, psychological and social-psychological aspects of musical performance and attitudes to learning.

Measures

(1) Questionnaire survey

Six questions were selected for the purposes of this gender and genre paper. These concerned (i) musicians' attitudes towards musical learning and teaching and (ii) musicians' self-concepts. With regard to musicians' attitudes towards musical learning and teaching, three particular aspects were investigated:

- *Views on the importance of musical skills in improving performance* (Williamon 2004; Hargreaves et al. 2003);
- *Use of learning and self-regulation skills during performance preparation* (Bandura 1997; Zimmerman and Martinez-Pons 1986; Hargreaves et al. 2007);
- *Views on the constituents of successful teaching of musical performance* (Hallam 2005).

In relation to aspects of participant musicians' self concepts, the following aspects were investigated:

- *Self-perceived expertise as a music performer* (Hallam 2005);
- *Musical self-efficacy attitudes* (Bandura 1997; Hargreaves et al. 2003; Sherer et al. 1982);
- *Importance of a 'musician self' in identity* (Marson 2000; Ashmore, Deaux, and McLaughlin-Volpe 2004)

Each of the first five of the above six foci consisted of a number of statements to which participants were asked to indicate their degree of agreement, or the extent to which the descriptions applied to them, on a seven-point, Likert-type scale.² The final aspect concerned the relative weighting that they assigned to their identity as musicians compared to other components of their identity. Judgement was based on their response using a seven-point Likert-type scale ranging from 'a lot less important than other aspects' to 'a lot more important than most other aspects'. Data obtained were subjected to statistical analysis with the aid of SPSS (a statistical analysis software package – SPSS 2007). The influence of genre and gender on the selected variables was investigated with multivariate analysis of variance (ANOVA), being chosen to reduce the possibility of conducting Type I errors compared to separate *t*-tests for each dependent variable. It also offered the benefit of exploring interactions between the two key variables of gender and genre. Dependent variables included responses to the questions described above.

(2) *Semi-structured interviews*

The face-to-face, semi-structured interviews focused on a range of issues related to each musician's personal development and experiences. Questions were clustered under overarching themes that embraced early influences on their musical development, self-efficacy and confidence as performers, reflections on performance experiences, the experience and possible influence of performance anxiety, the influence of the institution on learning (for undergraduate musicians) and the importance of membership in a performance group (for professional musicians), their thoughts on the process of transition from student to professional, any experiences of teaching and, finally, their experiences and views regarding formal and informal learning in music. We focus on two particular themes and their related questions: (i) *Personal assessment of ability* – 'Which yardstick do you use when you are rating your musical skills? What are your comparisons?' and (ii) *Preparation for public performance* – 'How do you prepare yourself for a public performance? How do you approach private practice? Describe typical practice strategies'. Each theme links directly to the survey questions reported here.

Data obtained from case study interviews were qualitative in nature and were analysed thematically, firstly using NVivo (a qualitative analysis software package – QSR International 2007), based on an iterative process of categorisation into main themes, according to the seven-stage process developed by Cooper and McIntyre (1993), and then by assessing any comparative bias in the frequency of these themes across interviews.

Description of participants

Respondents to Phase 1 were 244 musicians drawn from across the four HEIs. The participants included 170 undergraduates (70% of respondents, comprising complete year groups in each HEI) and 74 portfolio career musicians (30%), the latter following an active performing and teaching career in the UK. The mean age of the undergraduate musicians was 21 years old ($SD = 4.97$) and the mean age of the portfolio career musicians was 36 years old ($SD = 11.42$). Overall, there was a relative gender balance (male = 55%; female = 45%). Concerning genre, almost half of the respondents were classical musicians ($n = 117$; 48%), whilst the remainder comprised popular ($n = 66$; 27%), jazz ($n = 45$; 18.4%) and Scottish traditional musicians ($n = 16$; 6.6%). However, the inter-relationship between participant gender and genre was significantly uneven ($\chi^2 = 14.18$, $df 3$, $p < .01$). Whilst participant females constituted a majority of classical musicians (57%), they were minorities in popular music (36%), Scottish traditional (38%) and jazz (29%). Moreover, these proportions reflected common genre x gender annual recruitment biases in each participant HEI.

Overall, the instrumental categories in which participants specialised were Wind and Brass (26%), Strings (19%), Keyboards (17%), Guitar (15%), Voice (14%), Percussion and Other (8%), again with an uneven distribution across genres.

Twenty-seven undergraduate and portfolio career musicians subsequently participated in the case study phase, providing face-to-face semi-structured interviews. They were selected on the basis of ensuring a representative range of experiences and backgrounds from those who had completed the survey. Thirteen were classical musicians and 14 represented other genres. Case study musicians specialised in a wide range of instruments, including strings, woodwind, brass, piano/keyboard, voice, bass guitar, percussion, Scottish pipes and clarsach.

Results

(i) Questionnaire survey

Respondents were asked to indicate their degree of agreement or the extent to which the given descriptions applied to them on a seven-point Likert-type scale. Total scores on each of the questions included in the analysis were calculated for each participant. The total scores were subsequently used in the multivariate analysis of variance as dependent variables, for which the effects of gender and genre were investigated.

An initial statistical analysis (ANOVA) was undertaken to investigate any differences between participants across the three 'other-than-classical' genres (jazz, Scottish traditional, popular) on the six focus questions. With one exception, no statistical differences were evidenced between these genres. The exception concerned musical self-efficacy, with popular musicians rating themselves more highly than their jazz peers ($F(2,116) = 3.50$, $p < .05$). Consequently, given the relative statistical homogeneity across these three genre groups on the focus measures, the following analyses explore the extent to which classical music participants were distinctive compared to those who were other-than-classical (jazz, Scottish traditional, popular).

The effect of genre

Table 1 reports the mean scores on each of the selected variables by musical genre and the minimum and maximum possible scores on each scale, depending on the number of items included. The between genre groups significance is indicated in the last column.

Statistically significant differences between classical and other-than-classical musicians were observed in 'views on constituents of successful teaching' ($F(1,244) = 3.04$, $p = .042$),

Table 1. Comparison of ‘classical’ and ‘other-than-classical’ musicians on (a) views regarding musical learning and teaching and (b) self-perceptions.

	Possible scores on each variable		GENRE	Mean	Std. Deviation	Sig.
	Minimum	Maximum				
Importance attributed to musical skills	22.00	154.00	Classical	128.98	14.15	n.s.
			Other than classical	126.13	17.01	
Use of self regulation skills	10.00	70.00	Classical	43.70	10.29	n.s.
			Other than classical	43.73	10.16	
Views on constituents of successful teaching	16.00	112.00	Classical	81.13	10.25	.042
			Other than classical	78.00	13.52	
Perceived level of own expertise	10.00	70.00	Classical	45.88	9.99	.038
			Other than classical	43.52	8.60	
Musical self-efficacy attitudes	17.00	119.00	Classical	91.14	14.64	.010
			Other than classical	86.13	15.82	
Importance of ‘musician self’ in identity	1.00	7.00	Classical	5.69	1.12	n.s.
			Other than classical	5.69	1.30	

‘perceived level of own expertise’ ($F(1,244) = 4.46, p = .038$) and ‘musical self-efficacy attitudes’ ($F(1,244) = 6.79, p = .01$). Classical musicians evidencing higher agreement with the listed qualities of successful teachers, higher perceived levels of own expertise and higher musical self-efficacy. Figure 1 illustrates these differences graphically.

With regard to the variables that were non-significant statistically, findings suggest that all musicians attribute high importance to listed musical skills (such as technical proficiency and skills in interpretation), irrespective of their primary musical genre, as evidenced by the high mean scores on this variable (see Table 1 and Figure 1). Both classical and other-than-classical musicians reported moderate use of self-regulation skills during performance preparation, with both group means centred around the mean of the distribution. For both classical and other-than-classical musicians, the ‘musician self’ appears to be a core component of their identity as individuals, with high mean values attributed to this variable by participants (5.69 on a scale of 1 to 7).

The effect of gender

Table 2 reports the mean scores on each of the selected variables by gender, as well as the minimum and maximum possible scores on each scale, depending on the number of items that it embraced. The significance level between male and female participant musicians’ data is indicated in the last column.

Statistically significant differences between male and female musicians were observed in ‘importance attributed to musical skills’ ($F(1,244) = 5.64, p = .018$) and ‘use of self-regulation skills’ ($F(1,244) = 5.64, p = .018$). Female musicians attributed statistically higher importance to the listed musical skills and more frequent use of self-regulation during performance preparation. Figure 2 illustrates these differences graphically.

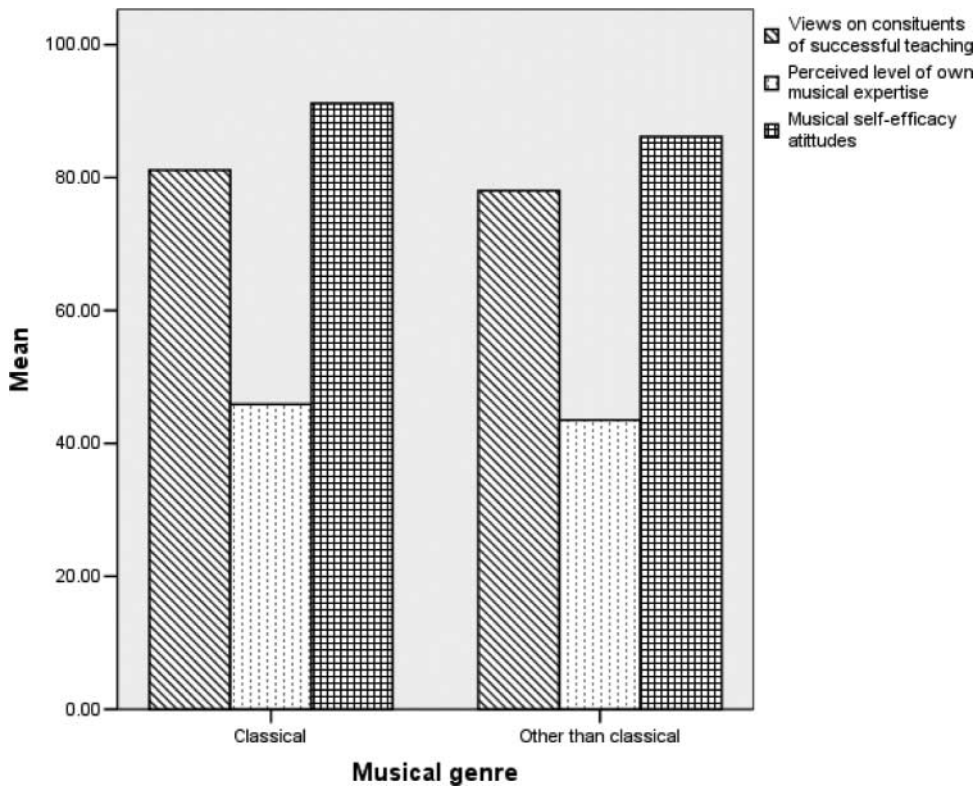


Figure 1. Statistically significant differences by musical genre.

With regard to the non-significant statistical variables, findings suggest that both male and female musicians overall agreed with the listed qualities of successful teachers, with mean scores above the mean of the distribution. Both sexes reported moderate perceived levels of ‘own expertise’, but – at the same time – they also reported musical self-efficacy that was above the mean of the distribution (Table 2 and Figure 2). Similar to the findings for musical genres, both male and female musicians reported that the ‘musician self’ component was highly significant to their overall identity, evidenced by the high mean values on this variable (5.58 and 5.70 respectively on a scale of 1–7).

Interaction effects between genre and gender

The multivariate analysis of variance revealed no statistically significant interaction effects between genre and gender on any of the dependent variables. This finding suggests that genre and gender act as independent factors in influencing musicians’ self-perceptions (personal expertise, self-efficacy, desirable skills, importance of music) and attitudes towards their own HE music learning (use of self-regulation and their views on constituents of successful teaching).

Variables that transcend genre and gender

The survey data indicate that the importance of a ‘musician self’ in identity was the only variable that did not reach statistical significance when comparing responses for musical genre or gender.

Table 2. Comparison of male and female musicians on (a) views regarding musical learning and teaching and (b) self-perceptions.

	Possible scores on each variable		GENDER	Mean	Std. Deviation	Sig.
	Minimum	Maximum				
Importance attributed to musical skills	22.00	154.00	Male	125.09	16.88	.018
			Female	130.41	13.78	
Use of self regulation skills	10.00	70.00	Male	42.36	10.40	.018
			Female	45.36	9.75	
Views on constituents of successful teaching	16.00	112.00	Male	78.73	12.67	n.s.
			Female	80.41	11.49	
Perceived level of own expertise	10.00	70.00	Male	44.75	9.24	n.s.
			Female	44.50	9.51	
Musical self-efficacy attitudes	17.00	119.00	Male	88.37	14.63	n.s.
			Female	88.69	16.45	
Importance of 'musician self' in identity	1.00	7.00	Male	5.68	1.28	n.s.
			Female	5.70	1.14	

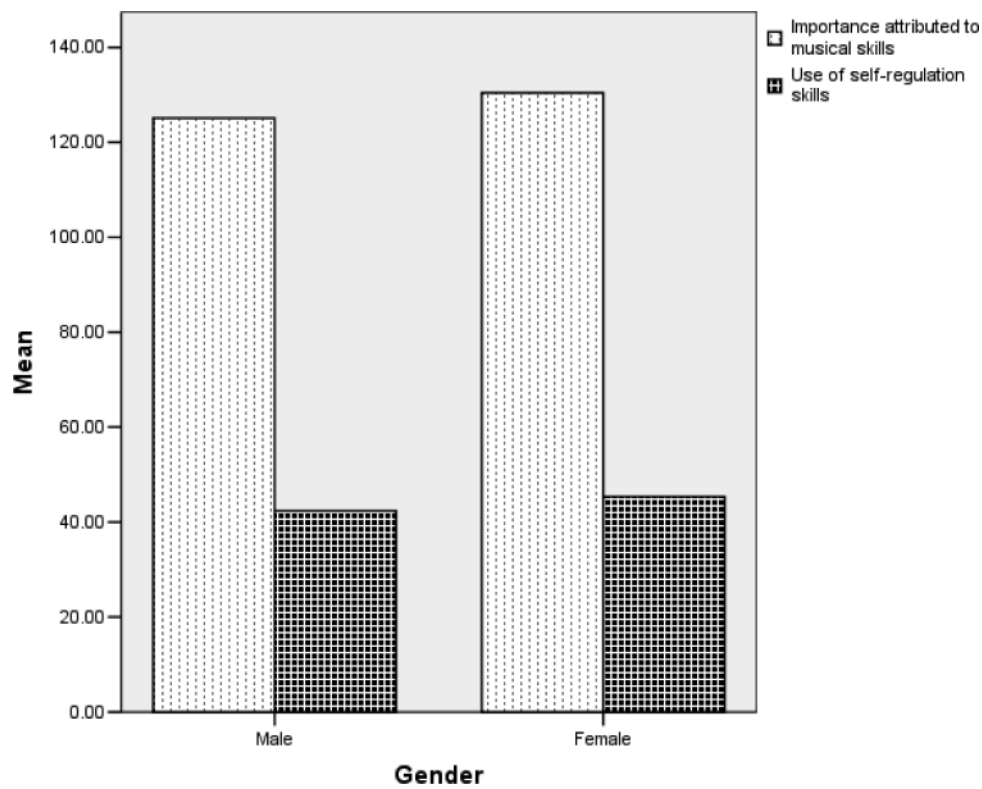


Figure 2. Statistically significant differences by gender.

Overall, the musical identity of musicians was found to be very strong and central to their view of themselves as individuals, transcending any group differences arising from gender and their main performance genre.

Case studies: further insights into musicians' attitudes and influences on learning

Analysis of the interview data provided additional insights into the impact of gender and genre. The two themes generated by the NVivo analyses (see above section on 'semi-structured interviews' – 'personal assessment of ability' and 'preparation for public performance') were examined to see which of these the case study participants mentioned the most frequently.

With regard to musical genre and perceived levels of personal expertise – linked to the above finding that classical musicians had higher perceived levels of self-expertise and higher musical self-efficacy – the interview data suggest that classical musicians tended to focus on constructive comparisons with either experts or themselves and relatively less with their peers (see Figure 3). In contrast, other-than-classical musicians tended to judge their levels of current expertise much more in terms of peer comparisons or with 'great' performers in their particular field – a category of expertise reference that was not mentioned by any classical musicians.

Comparing yourself to recordings you can think, well, maybe I need to change my tone in that way, or maybe I need to be more robust in the way that I phrase that, or sometimes you hear things in other people's performances and you think actually I don't like that – I don't like that tone that they use. (Classical musician, male)

I use my own yardstick. I have goals, and try to achieve them. I don't measure anything by anyone else. (Classical musician, female)

I think too much of music education focuses upon the technical aspects of playing an instrument and you're in many ways trained to sort of lay yourself prostrate at the feet of the greats. Trained as a jazz musician, you know, where, kind of, it's almost engraved in your mind that, you know, Charlie Parker, Joe Cartwright, Louis Moholo, these people, are the greats and that in order to make a contribution you have to assimilate everything they did and play like them or be able to play like them and be able to do the things that they did. And once you learned everything that they had to give, then you can move on and make your own contribution. I think that's a complete fallacy. It's actually impossible! (Other-than-classical musician (jazz), male)

With regard to gender, the interview data supported the quantitative findings that female musicians made more frequent use of self-regulation during performance preparation (see above and Figure 4). Additionally, male case study participants were inclined to be less structured in their practice behaviours and saw practice more in pragmatic terms.

If I'm learning a piece, it might be just reading the text or finding the notes. If I've learnt the piece, then practice means taking a passage that I find really difficult and taking it out and just singing that passage lots of times ... But I always warm up, even if it's just a few things like singing scales and normal warm-up type things! ... Say I've got a difficult melisma, I'd try to sing it lots of times, try to just get it in my voice to feel where it lies, and also look for patterns ... I'll take it and split it up into little tinier sections and then look at how those sections relate to each other and sort of get them together and then sing it all ... So that's one way, and then another way is sometimes, actually probably the most usual way is to do it very, very slowly and build up the speed. (Female classical musician)

I think there's loads of different ways to practice, because you can practice Scottish music by going along to a session and playing and although you're not technically, it's not like you're sitting down for a practice session ... that's really important practice, because it's developing different chord

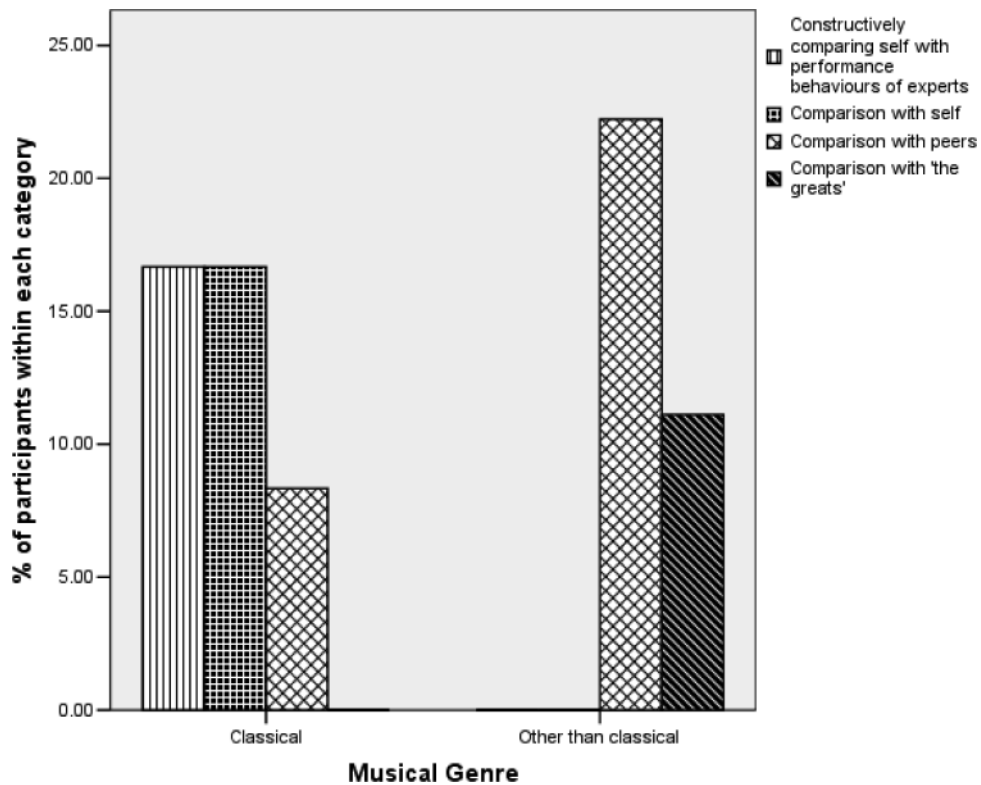


Figure 3. Assessment of personal expertise by musical genre.

ideas, and it's there you can start experimenting with different chord sequences, different riffs. You can throw them in there and it doesn't matter what happens, if it goes wrong it doesn't matter. (Female other-than-classical musician (Scottish traditional))

Something that I'm trying to get into now is to practice tunes and pieces that I'm going to perform in my personal practice time, which is something that I've never done before. I would always practice completely separate concepts that are actually quite unrelated to music, but more of a technique facility sort of thing. (Male other-than-classical musician)

Discussion of findings

Influence of genre

Findings from the survey, supported by the case study data, suggest that participant classical musicians agreed more with the listed qualities of successful teachers and had higher perceived levels of expertise and higher musical self-efficacy compared to their other-than-classical peers.

The finding that participant classical musicians agreed more with the listed qualities of successful teachers is intriguing. Given that the survey's items were drawn from the available research literature on what counts as effective teaching (cf. Hallam 2005), one implication of the data is that the classical musicians may have had more experience of teaching that is of high quality. Alternatively, it may be that the ways that other-than-classical musicians learn are poorly recognised in the literature. It is certainly likely that each umbrella grouping (classical/other-than-classical) has had distinctive biases in their teaching and learning experiences that

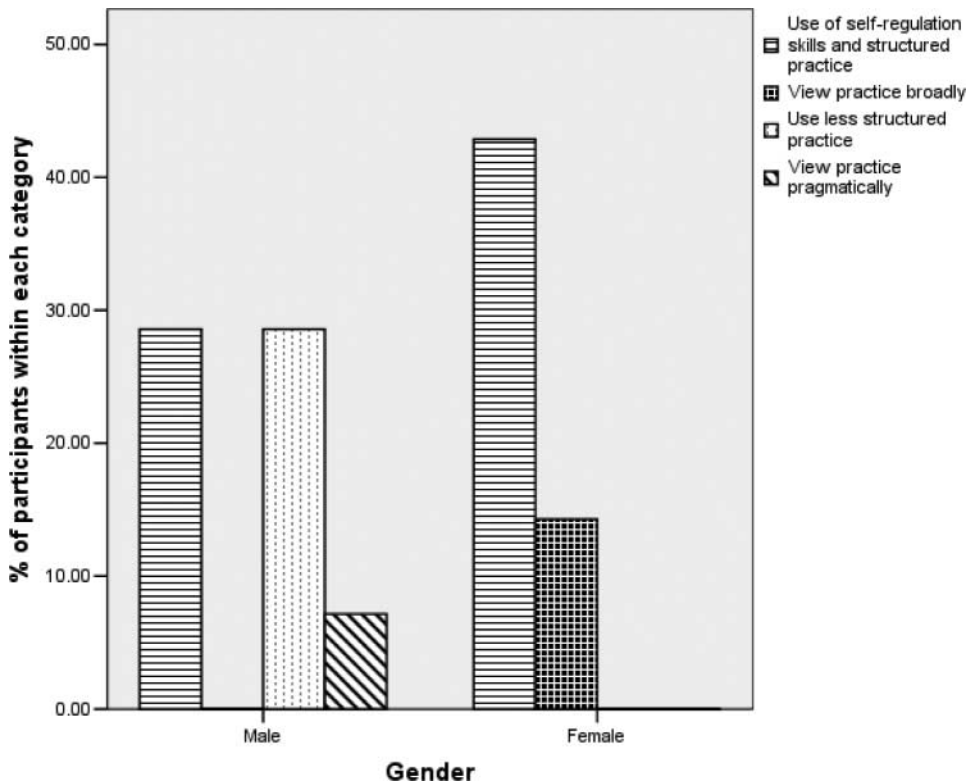


Figure 4. Approaches to preparation for performance by gender.

could influence their responses. The biographies of jazz, popular and Scottish traditional participants, for example, suggest that they began instrumental tuition several years later than their classical counterparts. Consequently, they are likely to have had comparatively less time, a smaller number of teachers and fewer opportunities to engage formally with expert tutors. Additionally, their particular musical genre learning is biased towards non-notational music making, i.e. improvisation and memorisation, as well as informal group learning, networking and ‘making music for fun’ (Creech et al. 2008). Furthermore, the tutors of other-than-classical genres in HE are likely themselves to be part of the same tradition and learning environment. Because their music is relatively new to HE, such tutors may have had less opportunity to engage with the critical frameworks that characterise contemporary formal teaching and learning expectations in UK HE.

In terms of musical self-efficacy, the reported discrepancy between musical genre grouping may be due to the fact that other-than-classical musicians appear to have idealised views of expertise that relate more to individual ‘greats’ (well-known performers) in their chosen genre. One consequence is that they perceive a larger gulf between their current level of expertise and that of their ‘ideal’. In contrast, when individual classical musicians discussed the playing of established figures, their comments focused on particular features of the performance behaviours rather than the other-than-classical view of feeling a need to emulate the complete individual style.

Nevertheless, apart from suggesting that there may be differences in the attitudes of musicians that are genre related, our findings also suggest that many similarities exist between their

musical learning approaches. Musicians, irrespective of musical genre, attribute high importance to the development of musical skills and are able to organise their practice in constructive ways, often through the use of self-regulation skills. All musicians, irrespective of genre, had a very strong musical identity, with their ‘musician self’ forming a core component of their overall sense of identity.

Influence of gender

The statistical findings indicated that participant female musicians attributed higher importance to the listed musical skills and reported more frequent use of self-regulation during performance preparation. These findings corroborate previous research that female musicians tend to use learning strategies more extensively compared to males (Bråten and Olaussen, 2000; Pajares, 2002; Zimmerman and Martinez-Pons, 1986). Nevertheless, although there were genre differences in musical self-efficacy, these were not evidenced in the gender data.

Findings also highlighted similarities between male and female musicians in their perceptions of what constitutes effective teaching. When gender is taken as the lens for data analyses, both female and male participants reported moderate perceived levels of expertise and both reported relatively positive musical self-efficacy. Similar to musical genre findings, both male and female musicians reported that the ‘musician self’ component was highly important in their identity. It may be that such gender similarities are influenced by commonalities in their personality type because androgyny (i.e. ‘the ability to move freely across stereo-typical sex-role behaviours’ (Wubbenhorst 1994, 63)) is reported to be the main psychological characteristic of musical performers (Kemp 1996).

Implications of the findings for education

Notwithstanding the statistically significant differences regarding particular aspects of the gender and genre in the data, there were no statistically significant interaction effects observed. This finding suggests that, in our data at least, genre and gender act as independent factors in influencing musicians’ self-perceptions and attitudes towards music learning and teaching in HE. Assuming that this is the case, then HE music curricula need to be more sensitive to the ways that gender and genre impact on musical learning and teaching and suitably differentiated to address any related biases that have negative influences on musicians’ learning trajectories. The data support other findings in the literature that male and female musicians may adopt different approaches to their HE learning. Any limitations in the breadth of their available learning strategies could have longer-term detrimental effects when they are faced with particular performance challenges. HEIs should seek to promote greater synergies between gender groups in their strategies for learning, including practice. Furthermore, it is crucial that we address the underlying reasons for any differences in self-perception between musicians of different genres. We need to investigate further why musicians of other-than-classical genres may label themselves as being less expert and with lower musical self-efficacy compared to their classical peers.

Nevertheless, a key positive finding from the study is that all musicians, irrespective of musical genre and gender, attribute high importance to their ‘musician self’ as a core component of their identity, signifying a shared deep love for music and a common motivation towards being successful. This is a solid basis for any curricular innovation that seeks to promote multi-genre musical expertise and rounded performance excellence. Arguably, such an approach would provide the foundation for achieving a more creative and fruitful symbiosis and greater collaboration between musicians of different communities and educational backgrounds. It may also

possibly lead the way to creating new musical fusions (a characteristic of much popular music) and a more versatile type of musician in the future whose love for music and desire to achieve excellence in music transcends musical genre, gender stereotypes and unintended negative tendencies in group identities.³

Notes

1. The *Investigating Musical Performance (IMP): Comparative Studies in Advanced Music Learning* research project is funded by the UK Government's Economic and Social Research Council as part of its Teaching and Learning Research Programme (TLRP) under award RES-139-25-0101. The award holders are Welch, Duffy, Potter and Whyton and the two-year research project (2006–2008) commenced in April 2006. See <http://www.tlrp.org/proj/Welch.html>
2. Measures of reliability revealed highly satisfactory Cronbach α values that confirmed a high internal consistency in these five measures.

Scale	Cronbach value
Importance attributed to musical skills	.886
Use of self regulation skills	.803
Views on constituents of successful teaching	.756
Perceived level of own expertise	.819
Musical self-efficacy attitudes	.881

3. We take this opportunity to thank all the participants across the four higher education sites, including their tutors, for their support and interest in the research.

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